(No Model.)

T. PIERCE.

REST FOR HEEL TRIMMING MACHINES.

No. 458,694. Patented Sept. 1, 1891.

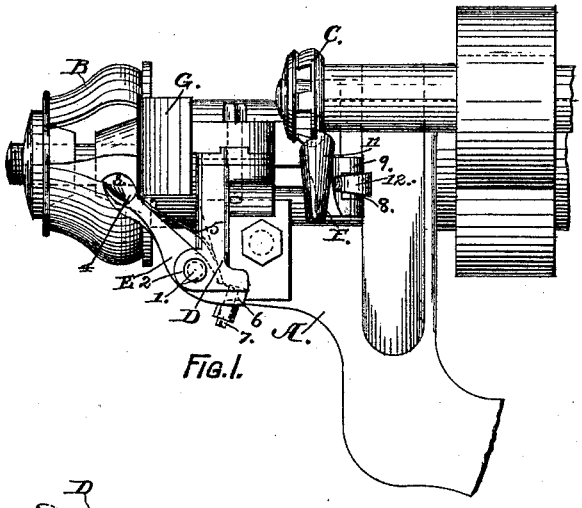

FIG. 1.

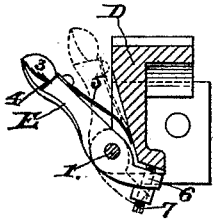

FIG. 3.

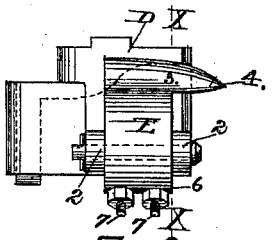

FIG. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS PIERCE, OF ALBANY, NEW YORK.

REST FOR HEEL-TRIMMING MACHINES.

SPECIFICATION forming part of Letters Patent No. 458,594, dated September 1, 1891.

Application filed June 29, 1889. Serial No. 316,012. (No model.)

To all whom it may concern:

Be it known that I, THOMAS PIERCE, of the city and county of Albany, in the State of New York, have invented a new and useful Automatically-Adjustable Rest for Heel-Trimming Machines, of which the following is a specification.

Heretofore rests for heel-trimming machines have usually been made in the form of rigid and inflexible attachments for said machines, and each machine has required a series of such rests in order to adapt it to the proper performance of its work on different heights of heels. As a consequence much time and labor has been unprofitably spent in changing the rest adapted to one height of heel to another suited to a different height. Besides this defect, much damage has resulted from the use of rigid rests when, in turning the shoe thereon to present different portions of the convex surface of the heel to the action of the cutter, the shank of the sole is brought into contact with said rest to throw the heel out of its proper position in respect to the cutter, and thereby an improper and defective trimming of the heel is produced.

The object of my invention is to remedy this defect by providing a rest that will automatically adjust itself to different heights of heels; and I attain this object by the mechanism illustrated in the accompanying drawings, which are herein referred to and form part of this specification, and in which—

Figure 1 is a side elevation of part of the head of a heel-trimming machine provided with my invention in two different forms, one being adapted to use with a heel-cutter and the other with a rand-cutter. Fig. 2 is a front elevation of the heel-cutter rest detached from the machine; and Fig. 3 is a side elevation of the same, showing the bracket in vertical section at the line X X on Fig. 2.

As represented in the drawings, A designates the head of a heel-trimming machine, or that part of said machine in which the shafts for the heel-cutter B and rand-cutter C are journaled; but it should be understood that said head and cutters form no part of my invention.

D is the bracket, to which my heel-cutter rest is jointed by means of a pivot-pin 1. Said bracket is secured to the head A by means of a bolt or bolts or any other suitable or preferred means. Said bracket is provided with lugs 2 for receiving a pivot-pin 1, which forms part of the joint above referred to. Between said lugs the bracket is channeled out to form a suitable clearance for permitting said rest to perform its movements, said channel being shown in Fig. 3.

E is my adjustable rest for use with the heel-cutter B. Said rest is provided with a head 3, on which the heel is supported while it is being trimmed into shape by said cutter. Preferably said head has on its outer end a rounded or coniform point 4; but the form of said point may be made to suit the preference of the user. A spring 5 is interposed between the back of said rest and the bracket D for the purpose of forcing the rest outwardly into its normal position, as shown by the full lines on Fig. 3. A rearwardly-projecting flange 6, formed on the lower part of said rest, is provided with set-bolts 7, which, by striking against the lower side of the bracket D, limit the outward movement of said rest. Said set-bolts are made adjustable in the flange 6, so that the limitation of said outward movement of the rest can be varied to suit the occasion.

G is the guide for the heel, which constitutes part of a well-known heel-trimming machine, but forms no part of my invention. Said guide is adjustable in respect to the cutter B, and its purpose is to guide the heel truly to said cutter. The face of said guide is formed on an angle which diverges outwardly, so that a heel can be guided thereby nearly to the cutter B before said heel is brought to its bearing on the rest E.

My invention operates in the following manner: In trimming the convex surface of a heel with the cutter B, with which the rest E is employed, the bottom of the heel is placed against the guide G and the shoe is pressed inwardly toward said cutter. In performing this part of the operation the back of the heel is usually turned toward the cutter, and by the time the latter begins to cut away the excess of material the heel should bear fairly on the rest E, so that the heel will be steadied thereby. While the cutter B is performing its functions the operator continues to turn

the shoe in such manner that the different portions of the convex surface of the heel will be presented to action of the cutter until the surplus stock of the heel is trimmed away and the heel reduced to the required shape and size. Preferably the trimming is effected by beginning the cutting at the back of the heel and working toward the edge of the breast of the heel, first passing over one side and then over the other side, and during this operation the shoe will of necessity be turned into a position where the surface of the shank of the sole will bear against the rest E at a point where the heel will have its least height, and then said rest will yield sidewise, as indicated by dotted lines on Fig. 3, so as to permit the cutter to properly perform its work without throwing the heel out of its place in respect to the cutter B. As soon as the rest is relieved from the side pressure to which it has been subjected in this last-described part of the operation the spring 5 will cause it to return to its normal position.

I do not limit myself to the precise means herein described for securing my rests for a trimming-machine, for I am aware that it may be effected in many different ways.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a heel-trimming machine, the combination of a heel-cutter B, a bracket D, a heel-rest E, hinged, as at 1, to said bracket and provided with a coniform head 3, a spring 5, whereby the head of said rest will be deflected outwardly from said bracket, and adjusting-screw 7, whereby the outward deflection of said head may be limited, as and for the purpose herein specified.

THOMAS PIERCE.

Witnesses:
A. E. FROST,
WM. H. LOW.